

ECHO CANCELLATION DEVICE FOR FULL DUPLEX COMMUNICATION SYSTEMS

Abstract

An echo cancellation device for a full duplex communications system is provided. The full duplex communication system has a transmitter for transmitting a transmit signal and a receiver for receiving a receive signal. The echo cancellation device has a filter for outputting a filter signal according to the transmit signal, an echo cancellation circuit connected to the filter for outputting an echo cancellation signal according to the filter signal, at least one echo cancellation resistor connected to the transmitter, the receiver, and the echo cancellation circuit, and an echo cancellation detection circuit for outputting a control signal according to an echo residue at the receiver to control the filter.